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Environmental Assessment

Off-Highway Vehicle Road Travel Access Project

Chippewa National Forest

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Background

The Chief of the Forest Service has identified unmanaged recreation, especially the undesirable impacts from unmanaged off-road vehicle (ORV) use, as one of the key threats facing National Forests and Grasslands today. Concerns include the amount of unplanned roads and trails, erosion, lack of quality ORV riding opportunities, water degradation, and habitat destruction from ORV activity. To address this issue, the Chief chartered two national teams in January 2004 to develop policy and tools for use at the field level.

The USDA Forest Service Strategic Plan for Fiscal Years 2004–2008 also identifies managing motorized recreation as one of the primary outdoor recreation opportunity goals: "…it is critical that we improve management of off-highway vehicles access and use on National Forest (NF) System lands to preserve high quality experiences for all recreational users."

On November 9, 2005, the Forest Service published the Final Rule for Travel Management with an effective date of December 9, 2005. This rule revised the regulations regarding travel management on NF System lands to clarify policy related to motor vehicle use, including the use of off-highway vehicles. The rule requires designation of those roads, trails, and areas that are open to motor vehicle use. Designations are made by class of vehicle and, if appropriate, by time of year. Following direction in the USDA Forest Service Strategic Plan for Fiscal Years 2004–2008, and guidance from the Draft Travel Management Rule (the Final Travel Management Rule had not been published at the time the FEIS was prepared), Forest staff revised the Chippewa National Forest Land and Resource Management Plan (Forest Plan) to implement the Forest Service ORV policy. The direction in the 2004 Forest Plan changed ORV management from a closed unless posted open policy, to a one of designating Forest Service System roads open for ORV use. This designation of system roads would occur through the development and publishing of the Motor Vehicle Map (MVUM). The MVUM and 36 CFR Part 212 Sec. 50 places the responsibility on the individual to know where they can legally ride, rather than posting prohibitions.

In 2002 the Minnesota Legislature passed a law requiring the Department of Natural Resources (DNR) Commissioner to appoint a Motorized Trail Task Force to review and make recommendations to the 2003 Legislature addressing eight topics relating to OHV trails on State Forest lands. Twenty-two citizens were appointed to the Task Force in June 2002; their recommendations were published in January 2003. One significant task item was to complete a comprehensive inventory of all routes on State Forest lands. This inventory would form the baseline for preparing an individual travel management plan that would classify each State Forest and scattered State Forest lands as managed, limited, or closed to motorized use. Within the boundary of the Chippewa National Forest (CNF) there are seven State Forests. The DNR; Forest Service; Beltrami, Cass, and Itasca Counties; and Leech Lake Band of Ojibwe (LLBO) have collaborated in joint ORV planning for each agency. It is anticipated that the DNR Commissioner will announce his final decisions for the seven State Forests and scattered State Forest land classifications located within the project area in the summer of 2007. The proposed action being analyzed in this analysis is the result of the recommendations from the interagency planning team.

Additionally, the National Association of Counties passed a resolution in July 2003 regarding OHV management on public lands. They proposed that the Forest Service and Bureau of Land Management expedite the development of new travel policies and plans, as well as interim site specific plans, in conjunction with local government and community-based partnerships that

require OHVs to stay on designated roads, trails, or in limited off-road areas. Their resolution stated in part: "The range and ability of OHV to access remote public lands have placed demands on local search and rescue teams, helped to spread noxious and invasive weeds, have resulted in conflicts with other recreation users, ranchers, hunters, wildlife, and have caused environmental damage." To date, Beltrami, Itasca, and Cass Counties near the CNF have developed plans that address ORV road and trail access on country-owned lands, roads, and areas.

Off-road (ORV) and Off-highway (OHV) Vehicles

Off-road vehicle (ORV) and off-highway vehicle (OHV) are interchangeable phrases for any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat; (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes; and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, or contract (EO 11644, Sec. 2). The terms off-highway (OHV) and off-road (ORV) are nearly synonymous; however, ORV implies use only off of roads and OHV does not.

A wheelchair is defined as, "a device designed solely for use by a mobility impaired person that is suitable for use in an indoor pedestrian area" (ADA title V Section 507(c) and FSM 2355.05 (12)). ORVs and OHVs are not considered designed solely for use by a mobility impaired person nor suitable for indoor pedestrian use.

ORV System Trails

Trails are outside the scope of this analysis; however, the CNF operates and maintains a designated ORV trail on the Forest. The Soo Line Trail begins in Cass Lake, Minnesota, and extends approximately 20 miles to the community of Remer, Minnesota, where it leaves the Forest boundary and continues to the community of Moose Lake, Minnesota. Additionally, the Soo Line Trail is a designated State of Minnesota Grant-In-Aid ORV Trail. The development of up to 90-miles of additional designated ORV trails may be considered through future analysis. CNF staff will continue to work collaboratively with state, Tribal, and local governments and interested parties on ORV system trail designations.

Cross-County Travel

Both the 1986 and 2004 Chippewa National Forest Plans prohibit ORV use off system roads and trails, which is defined as cross-country travel. While the 2005 Travel Management Rule requires all forests in the Nation to designate roads, trails, and areas open for ORV use, the Regional Forester for the Eastern Region, though the Record of Decision for FEIS, decided that only roads and trails could be designated open for ORV use on the CNF. Exemptions are not allowed for hunting or trapping. As identified in the purpose and need for the Off-Highway Vehicle Road Travel Access Project only Forest Service System roads will be considered at this time for being designated as open to ORV use.

All current direction and authority for vehicle use off roads on NF System lands are tiered from Executive Order (EO) 11644 (1972) and modified by EO 11989 (1977). The Travel Management Rule includes 36 CFR 212, 251, 261, and 295.

Purpose and Need for Action

The purpose of this project is to identify the roads for OHV use on the CNF in concert with the goals and objectives outlined in the July 2004 Land and Resource Management Plan (also referred to as the Forest Plan). The project would also comply with the 2005 Travel Management Rule requiring a designated route system for motor vehicle use by vehicle class and if appropriate, by time of year.

Management actions are needed to move the existing condition towards the goals (Forest Plan, pages 2-4), objectives (Forest Plan O-ORV-1, page 2-42), and desired conditions (Forest Plan, D-ORV-1, page 2-42) for OHV use on designated roads in the CNF and to meet the requirements of the 2005 Travel Management Rule.

However, the over 250 percent increase in ORV registrations in the State of Minnesota and associated increased demand for riding opportunities on NF land is the primary driver for the need to address ORV planning and route designation on the CNF. In Minnesota, registrations of ORVs have increased from about 9,204 in 1994 to 222,594 in 2004 (Minnesota Department of Natural Resources 2005 OHV Study, page 33). The Off-Highway Vehicle Road Travel Access Project is needed to consider how the CNF can provide recreation experiences and traditional Tribal access opportunities considering increased use and changes in law, regulation, and policy under the 2005 Travel Management Rule and the 2004 Forest Plan. Many Forest users prefer non-motorized recreation experiences and more solitude; therefore, another need for the project is to address the needs of all Forest users under increasing recreation pressure from motorized vehicle use.

Please see the following links for additional information from the State of Minnesota on trends in ORV registration and recreation use. 551-0 OHV Trends; 552-0 OHV Registrations; 553-0 UM Extension Study

Designation of legal motorized routes on the CNF is also needed to protect natural resources under increasing recreation pressure from motorized vehicle use. ORV riding can affect soil and water resources in a number of ways. On the routes themselves, compaction, rutting, and erosion of soils can result in increased runoff and deposition of eroded material into lakes, streams, or wetlands. Excess runoff and sediment can impact water quality, channel stability, aquatic habitat, and wetland vegetative conditions. Compaction and rutting on routes in wetlands can disrupt wetland hydrology and thereby impact wetland vegetation and habitat (USDA Forest Service 2004b; MN DNR 2002).

ORV riding also affects wildlife, fish, and rare plant resources. Motorized vehicle traffic can cause a visual or audible disturbance to some species of wildlife. If this occurs during a critical breeding time, it may cause nest or territory abandonment and lead to decreased fecundity rates. Increased densities of packed snow trails can reduce the competitive advantage of species like the Canada lynx, by allowing other predators that are not as adapted for deep snow conditions to access suitable lynx habitat and compete for prey species. Increased levels of access to the Forest can also facilitate the illegal killing of wildlife species.

Proposed Action

The CNF proposes to designate those roads and trails on NF lands that are to remain open to OHV use. The proposed action (Alternative 2) presents an interdisciplinary, public involvement-based, OHV travel management solution for the CNF. The proposed action includes roads that

were analyzed against a series of resource data layers within a geographic information system. These roads were discussed with other land management agencies, including the Minnesota Department of Natural Resources; Beltrami, Cass, and Itasca Counties; and townships with roads crossing the CNF. The alternatives were also presented to the Leech Lake Band of Ojibwe (LLBO) at various local Indian councils, and to the public at several workshops.

Type of Vehicle Restrictions

Roads that travel through some soil types on the CNF will be closed to motorized vehicles over 1,000 pounds as a mitigation measure to protect natural resources and the road infrastructure. Due to the spatial nature of route designations, the number and mileage of roads closed to vehicles weighing more than 1,000 pounds varies between 0 to 24 miles in the alternatives.

Season of Use Restrictions

There are no specific season of use restrictions proposed other than those already in practice on the CNF to protect natural resources (such as bald eagle nest sites) and facility investments (such as road closures during spring break-up periods).

Proposed Action by Road Maintenance Level

Alternative Map. A map of the proposed action can be viewed or printed at the following link: 611-2 Alternative 2 Map

The intended level of maintenance for a road is termed the Objective Maintenance Level (OML). OMLs are divided into five levels of maintenance intensity. OML 1 is the lowest level of maintenance and is closed to public use; OML 5 is the highest level of maintenance. Complete definitions of OML levels can be found 620-2 OML definitions. The miles of roads proposed to be open for ORV travel by OML are summarized in Table 1.

Table 1. Proposed action summary of miles of roads proposed open to ORVs

OML Roads	Miles of Roads Proposed Open to ORVs
1	0
2	1,168
3	83
4	133
5	0
Total	1,384

Possible Forest Plan Amendment

In addition to the proposed route system, the Forest Supervisor may also consider a non-significant amendment to the CNF Land and Resource Management Plan (Forest Plan). The wording may be changed to:

> G-RMV-1: ORV use is prohibited on OML 3, 4, and 5 roads, except where they have been designated as open for ORV use through site-specific analysis.
>
> http://www.fs.fed.us/r9/forests/chippewa/projects/forest_plan/index.php

Decision Framework

The decision to be made is whether or not to change the Forest transportation system and motor vehicle use restrictions as proposed or in some fashion that achieves the stated purpose and need for the project. Note that the prohibition in 36 CFR 261.13 does not become effective until publication of a motor vehicle use map (MVUM).

Over-snow vehicles are exempt from the designation of roads, trails, and areas for public motor vehicle use and are therefore not addressed in this project (see 36 CFR Part 212 Sec. 51 (a)(3)).

Public Involvement

Current Multi-Governmental ORV Planning Team

A multi-governmental ORV Planning Process Team meets regularly in northern Minnesota to strategically guide ORV planning. The team consists of the Leech Lake Band of Ojibwe's Director of Natural Resources and a law enforcement representative; a County Commissioner from each of Itasca and Beltrami Counties; the Land Commissioners from Cass and Beltrami Counties; a representative from Itasca county; two Minnesota Department of Natural Resources (DNR) Regional Commissioners, the Chippewa Forest Supervisor, and necessary Forest Service and Minnesota DNR staff. This group provides direction, guidance, and information for the development of community workshops and multi-agency working groups (addressing current road condition, mapping, signing, public information, and law enforcement). The group also facilitates dissemination of information to the variety of government officials, land management agencies, and the public (via newsletters, presentations, and conversations).

General Public Involvement on ORV Planning to Date

The proposal was first listed in the Schedule of Proposed Actions in October 1, 2006: http://www.fs.fed.us/sopa/components/reports/sopa-110903-2006-10.pdf]

The initial proposal for designating roads open to ORV use was discussed with the public; personnel from other Federal, state, and county agencies; and local and Tribal governments during five workshops held in communities across the Forest area in January 2006. The workshops included use of an interactive computer program of Forest geographic information system (GIS) data that allowed participants to pick specific Forest roads and consider several different resource layers, such as wetland and threatened and endangered species concerns. Through the interactive display of Forest road and resource information, discussions at the workshops, and internal discussions and considerations, a proposed action was developed.

Three public meetings were held to discuss the proposed action in October 2006 in several communities within the CNF; over 200 people attended those meetings. The initial scoping letter was sent to over 400 people on the Forest mailing list. The public comments and responses to comments are located in the project record.

Public Involvement Opportunities for Tribal and Low Income Populations

In additional to general public outreach, personal contacts have been made with the Leech Lake Band of Ojibwe (LLBO) Tribal Historic Preservation Office (THPO) and Local Indian Councils (LICs). For each of the 16 LICs, Forest staff attended two meetings between December 2006 and

March of 2007, one to present the project, and another to receive feedback on the proposal. Information from the LICs was used to develop Alternative 4 for analysis in this project.

For additional information, please see the following link: 621-2 Issues and Alternatives

Issues

An issue is a point of disagreement, debate, or dispute with a proposed action based on some anticipated effect. Forest Service personnel receive public comments and categorize them into significant or non-significant issues. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "…identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)…"

Significant issues are those with a clear direct, or indirect causal relationship from implementing the proposed action. Non-significant issues are identified as those (1) outside the scope of the proposed action; (2) already decided by law, regulation, Forest Plan, or other higher level decision; (3) irrelevant to the decision to be made; or (4) conjectural and not supported by scientific or factual evidence.

A complete description of the significant issue statements may be found at the following link: 621-2 Issues and Alternatives

Significant Issues

The Forest Service identified seven significant issues from public scoping:

Issue 1: Provide more connections for loop and longer day recreation experiences

Indicator: Miles providing loops and connecting routes

Issue 2: Provide increased access during hunting season

Indicator: Additional access provided during hunting season

Issue 3: Provide increased access for recreation experiences

Indicator: Miles open to ORV use

Issue 4: Protection of natural resources and non-motorized recreation experiences

Indicator: Miles open to ORV use in lynx analysis units

Issue 5: Dead-end routes may encourage illegal use

Indicators: Number of dead end routes and miles open in riparian management zones (RMZ)

Issue 6: The lack of annual operations and maintenance funding for roads

Indicators: Projected road maintenance costs for OML 3, 4, and 5 roads (those subject to National Highway Traffic Safety Act standards) and projected road maintenance costs for OML 2 roads

Issue 7: Environmental Justice and access to traditional hunting and gathering areas

Indicator: Miles open to ORV use within traditional Tribal hunting and gathering areas

Issues Considered but Not Used to Develop Site-Specific Alternatives

Issue: Impacts of consolidating use on a smaller system

Issue: Keep specific roads open

Issue: Estimated annual law enforcement costs

Alternatives

For a more comprehensive description of the issues and alternatives, please see the following linked document: 621-2 Issues and Alternatives

Possible Forest Plan Amendment

The Forest Supervisor may also consider a non-significant amendment to the CNF Land and Resource Management Plan (Forest Plan) for all but the no-action alternative (Alternative 1). The wording may be changed to:

> G-RMV-1: ORV use is prohibited on OML 3, 4, and 5 roads, except where they have been designated as open for ORV use through site-specific analysis.
>
> http://www.fs.fed.us/r9/forests/chippewa/projects/forest_plan/index.php

Alternative 1 (No Action)

Alternative Map. A map of the no-action alternative can be viewed or printed at the following link 610-2 Alternative 1 Map

36 CFR Part 212 Sec. 50(b) authorizes the responsible official to incorporate previous administrative decisions regarding travel management made under other authorities, including designations and prohibitions of motor vehicle use. These previous designations and prohibitions are the existing baseline condition and can be designated without a new decision if no changes are proposed.

For the CNF Off-Highway Vehicle Road Travel Access Project, the baseline condition for route designation is the current designations and prohibitions for public motor vehicle use on CNF roads as outlined in the goals (Forest Plan, pages 2–4), objectives (Forest Plan O-ORV-1, page 2–42), and desired conditions (Forest Plan, D-ORV-1, page 2–42) of the 2004 Chippewa Forest Land and Resource Management Plan.

A substantial review of all FS roads was completed during the initial interagency ORV route designation process. All roads were discussed concerning possible jurisdiction errors. Each OML 2 road was also reviewed for past decisions, locations to sensitive areas, and appropriateness of adding ORV use. Many attributes in the corporate database were updated during the review process, and some were made after a field review to determine specific inconsistencies. Updates to road maintenance level designations in the database were made to more accurately reflect on-the-ground conditions and were administrative only. No maintenance activity or physical on-the-ground change occurred to make the corrections accurate. The database corrections were substantial enough to change to overall statistics of the road system, as shown in Table 2.

Table 2. FS system road updates based on inventory corrections

OML	Miles of FS System Roads					
	Closed		Open		Total	
	Initial Inventory	No Action Inventory	Initial Inventory	No Action Inventory	Initial Inventory	No Action Inventory
1	59	382	258	0	317	382
2	387	147	1,285	1,530	1,672	1,676
3	0	183	263	0	263	183
4	0	252	263	0	263	252
5	0	34	34	0	34	34
Total	446	998	2,103	1,530	2,549	2,527

Alternative 2 (Proposed Action)

See previous description under Proposed Action section.

Alternative 3

Alternative Map. A map of Alternative 3 can be viewed or printed at the following link: 612-2 Alternative 3 Map

Alternative 3 considers an alternative way to meet the purpose and need of the project through emphasizing resource protection, the ability to experience solitude, and environmental protection values in designating roads open to ORV use on the CNF. This alternative provides access on OML 3, 4, and 5 roads with the intent of restricting ORV access to protect resources along lower-standard OML 2 roads. Buffers around non-motorized trails are considered in Alternative 3 and around semi-primitive non-motorized areas. This alternative also includes a reduced number of dead-end routes.

Type of Vehicle Restrictions

Roads that travel through some soil types on the CNF will be closed to motorized vehicles over 1,000 pounds as a mitigation measure to protect natural resources and the road infrastructure. Due to the spatial nature of route designations, the number and mileage of roads closed to vehicles weighing more than 1,000 pounds varies between 0 and 24 miles in the alternatives.

Season of Use Restrictions

There are no specific season of use restrictions proposed other than those already in practice on the CNF to protect natural resources (such as bald eagle nest sites) and facility investments (such as road closures during spring break-up periods).

Alternative 3 by Road Maintenance Level

Table 3. Alternative 3 summary of miles of roads proposed open to ORVs

OML Roads	Miles of Roads Proposed Open to ORVs
1	0
2	705
3	76
4	99
5	0
Total	880

Alternative 4

Alternative Map. A map of Alternative 4 can be viewed or printed at the following link: 613-2 Alternative 4 Map

Values expressed by the public for increased loops, connections between roads open to ORV use, and longer day riding opportunities are considered as alternative ways to meet the purpose and need of the project in Alternative 4. Forest areas around Remer and Big Fork, and connections between communities, are considered for increased open road access to address the belief that these riding opportunities provide an economic benefit to local communities. To provide loops and connections, many OML 3 and 4 roads are included in this alternative.

Increased access during hunting season is addressed in this alternative through designating additional roads open to ORV use seasonally (mid-September to December 31) specifically for hunter access on the CNF. This timeframe was selected because it includes the majority of hunting seasons within the State.

The Environmental Justice analysis of potential impacts to Tribal and low income populations is explored in this alternative through providing roads to areas identified as important to traditional hunting and gathering practices. Please note that the routes included in this alternative are open to everyone.

Type of Vehicle Restrictions

Roads that travel through some soil types on the CNF will be closed to motorized vehicles over 1,000 pounds as a mitigation measure to protect natural resources and the road infrastructure. Due to the spatial nature of route designations, the number and mileage of roads closed to vehicles weighing more than 1,000 pounds varies between 0 and 24 miles in the alternatives.

Season of Use Restrictions

Increased access during hunting season is addressed in this alternative through opening additional roads from September 15 through December 31 each year. The restrictions already in practice on the CNF to protect natural resources (such as bald eagle nest sites) and facility investments (such as road closures during spring break-up periods) would still occur.

Alternative 4 by Road Maintenance Level

Table 4. Alternative 4 summary of miles of roads proposed open to ORVs

OML Roads	Miles of Roads Proposed Open to ORVs
1	0
2	1,493
3	113
4	158
5	13
Total	1,777

Mitigation Specific to the Project and Common to All Alternatives

1) Roads that travel through some soil types on the CNF will be closed to motorized vehicles over 1,000 pounds to protect natural resources and the road infrastructure. Due to the spatial nature of route designations, the number and mileage of roads closed to vehicles weighing more than 1,000 pounds varies between 0 and 24 miles in the alternatives.

2) Annually update the Motor Vehicle Use Map (MVUM) incorporating information from the public and changes in resource conditions.

3) Following the publishing of the MVUM, law enforcement will increase public awareness of ORV designations though field contacts with users, and if necessary, issuing citations.

4) CNF staff will promote public education of the MVUM through issuing news releases, updating the Forest website, meetings with ORV clubs and other special interest groups, and the development of ORV education material.

5) CNF staff will work with other agencies (DNR, LLBO, county and township governments) to increase awareness of ORV designations and help reduce barriers for ORV riders using roads that cross multiple ownerships.

6) Forest Roads would be signed at the entrance of mixed use roads with identification signs printed horizontally and with a “share the road” sign. Identification signs printed vertically will be installed on those roads defined as an OML 2, which are generally designated for ORV use.

7) These road identification signs will correlate with identification numbers on the MVUM map. Installation of all new road identification signs is scheduled for completion by the end of 2007. Replacement costs for signs stolen, and/or damaged will continue to be an annual expense, at about $30 per sign (including sign, post, and installation).

Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Table 5 compares alternatives by issue; Table 6 compares alternatives by recreation resource indicator.

Table 5. Comparison of alternatives by issue

	Alternative 1 (No Action)	Alternative 2 (Proposed Action)	Alternative 3	Alternative 4
Issue I: Connections and Loops (miles)	58	244	179	279
Issue 2: Seasonal Access	Current resource & facility protection closures	Current resource & facility protection closures	Current resource & facility protection closures	Additional roads open from 9/15–12/31
Issue 3: Miles Open	1,530	1,384	880	1,777
Issue 4: Open Miles in LAU	1,065	978	627	1,249 [1]
Issue 5: Dead-ends	507	288	2	482
Open Miles in RMZ	17.7	15	4.5	21.8
Issue 6: Estimated Road Cost–OML 3,4,5 [2]	$0	$12,960–$25,920	$11,160–$22,320	$17,700–$35,400
Estimated Road Cost – OML 2 [2]	$379,371	$332,724	$225,202	$282,562
Issue 7: Open Miles in Traditional Areas	632	549	382	446
Law Enforcement Costs	$73,648	$102,598	$144,753	$113,137
OML Road Miles Open to ORV Use				
OML 1	0	0	0	0
OML 2	1,530	1,168	713	1,501
OML 3	0	83	81	119
OML 4	0	133	105	163
OML 5	0	0	0	13

[1] This figure assumes a worse-case scenario of snow compaction during hunting season (additional roads open from 9/15–12/15). In addition, many of the OML 3, 4, and 5 roads included in this alternative to provide connectors and loop experiences to ORV riders are currently plowed during the winter. Increased motorized use on higher standard, consistently plowed roads is not considered as having the same impact to lynx habitat as increasing use and compacting snow on the interior Forest OML 2 roads that are traditionally not plowed.

[2] The amount of ORV use will vary and change under new route designations, and therefore so will the type and amount of road repairs change. The figures listed are only estimates provided for comparative planning purposes. OML 2 roads currently do not receive road maintenance.

Table 6. Comparison of alternatives for the recreation resource indicators

Recreation Indictors	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Miles of Forest Service System roads open to ORV use, connected to each other and greater than 5.0 miles in length	58	244	179	279
Miles of Forest Service System roads open seasonally (mid-September to December 31) for hunter access to ORV	0	0	0	645
Miles of Forest Service System roads open to ORVs on the CNF	1,530	1,270	847	1,042
Miles of Forest Service System roads closed to ORVs on the CNF year-round	998	1,143	1,629	732
Miles of Forest Service System roads open seasonally (TES, road bed, resource condition, other) on the CNF	0	114	51	108
Road densities within ROS classification				
Semi-primitive Non-Motorized (miles per square mile)	0.34	0.36	0.41	0.55
Semi-primitive Motorized (miles per square mile)	0.60	0.48	0.15	0.56
Roaded Natural (miles per square mile)	1.89	1.78	1.35	2.12
Rural (miles per square mile)	2.34	2.02	1.59	2.52
Road densities within 0.5 mile of Semi-primitive Non-motorized areas (miles per square mile)	2.1	2.0	1.7	2.1
Road densities within 1.0 mile of Semi-primitive Non-motorized areas (miles per square mile)	2.2	2.0	1.7	2.1
Road densities within 0.5 mile of the North Country National Scenic Trail (miles per square mile)	1.9	1.7	0.7	1.5
Road densities within 1.0 mile of the North Country National Scenic Trail (miles per square mile)	1.8	1.6	0.8	1.6
Number of Forest Service System roads that are 0.25 mile or less and that do not connect to other system road open for ORV use	507	271	2	45

Environmental Consequences

For more detailed information regarding the environmental consequences of a particular resource, please see the following links:

510-2 Transportation

520-2 Hydrology and Soils

530-2 Environmental Justice

540-2 Wildlife and T/E/S

550-2 Recreation

560-2 Social and Economics

Compliance Summary

The environmental consequences to all of the alternatives for the CNF Off-Highway Vehicle Road Travel Access Project meet the requirements of the 2005 Travel Management Rule (including 36 CFR 212, 251, 261, and 295); the Chippewa Forest Plan standards and guidelines; the intent of Executive Orders 11644 and 12898; and other laws, regulations and other requirements to which the Forest subscribes related to the project.

All alternatives comply with the Forest Plan objectives, standards, and guidelines relative to threatened and endangered species (TES), Regional Forester sensitive species (RFSS), management indicator species (MIS), management indicator habitats (MIH), non-native invasive species (NNIS), other species of interest, and aquatic communities on National Forest land. Much of this report was derived from the biological assessment of threatened, endangered, and proposed species, and the biological evaluation of RFSS. Both of these detailed source documents are available to the public and can be found in the project record.

For heritage resources, there is not an undertaking with this project because no new trails or roads will be built. Therefore, a Section 106 is not required.

Due to the large number of mixed-use road designations in Alternatives 2, 3, and 4, the Forest is considering a non-significant Forest Plan amendment. The Forest Plan wording may be changed to:

> G-RMV-1: ORV use is prohibited on OML 3, 4, and 5 roads, except where they have been designated as open for ORV use through site-specific analysis.

Although the expected environmental consequences of each alternative meets regulatory requirements, the diverse values and issues expressed by the public present a wide range of opportunities for meeting the purpose and need of the project. Many opposable consequences, outcomes, and trade-offs appear possible with the choices presented by the alternatives. The following paragraphs discuss the significant issues and associated environmental and social consequences.

Summary Comparison of the Direct and Indirect Effects of Alternatives by Issue

Issue 1: Provide more connections and loops for longer day recreation experiences

Affected Environment. In the State of Minnesota, registrations of ORVs have increased from about 9,204 in 1994 to 222,594 in 2004. Minnesota riders stated that they desire rides that are approximately 20 miles long and that take about 4 hours (Minnesota Department of Natural Resources 2005 OHV Study, page 33). An increase in ORV use can bring economic benefits for communities that provide services such as gas, parts, repair service, food, and lodging. Individuals identified the communities of Big Fork, Remer, and the Lake Winnibigoshish area as locations for connector routes and loop riding opportunities. On the CNF there are currently 58 miles of Forest Service System roads that provide a riding experience greater than 5.0 miles in length.

Environmental Consequences. Alternative 1 (no action) represents the least amount of loop/connector routes available for longer riding experiences. Alternative 4, which represents the highest multiple opportunities for ORV users, would provide 279 miles of loops and connectors

over 5 miles in length, with many located near the communities of Big Fork, Remer, and Lake Winnibigoshish. Through the mixed use analysis, 294 miles of OML 3, 4, and 5 roads would be designated open. ORV riders would also continue to have access to the Forest for general recreation riding, trapping, fishing, hunting, loop riding, and other associated activities on the OML 2 roads.

Issue 2: Provide increased access during hunting season

Affected Environment. The majority of ORV use in Minnesota occurs during the fall hunting season (2001 Genereux OHV Study). There are currently no miles of NF System roads designated open to ORV use seasonally specifically for hunter access on the CNF.

Environmental Consequences. Alterative 4 is the only alternative that responds to the request for increased hunter access in the fall with an additional 645 miles of system roads open to ORV use (mid-September to December 31). Implementing this alternative may feel more limiting or restrictive to ORV users throughout the spring and summer months than the existing condition; however, there would be an overall increase in fall ORV access on system roads. Alternative 3 provides the least amount of hunter access to the general Forest area because of the lack of OML 2 roads designated open.

Issue 3: Provide increased access for recreation experiences

Affected Environment. There are 2,528 miles of NF System roads on the CNF. Each system road is to be maintained to a level commensurate with the planned function and use of the road (see Table 7). The intended level of maintenance for a road is termed the Objective Maintenance Level (OML). OMLs are divided into five levels of maintenance intensity. OML 1 is the lowest level of maintenance and is closed to public use. OML 5 is the highest level of maintenance. Complete definitions of OML levels can be found 620-2 OML definitions

Table 7. Chippewa National Forest road mileage by objective maintenance level

Objective Maintenance Level	Miles of Forest Service System Roads for ORV Use		
	Open	Closed	Total
OML 1	0	383	383
OML 2	1,530	147	1,677
OML 3	0	183	183
OML 4	0	251	251
OML 5	0	34	34
Total	1,530	998	2,528

Mixed Use. NF System roads are designed primarily for use by highway-legal vehicles such as a passenger car or log truck. Some NF System roads also provide recreational access to non-highway legal ORVs. Motorized mixed-use is defined as designation of a NF System road for use by both highway-legal and non-highway-legal motor vehicles. OML 3, 4 and 5 roads are higher standard roads and subject to the National Highway Traffic Safety Act and more strict standards for public safety. To allow ORV use on an OML 3, 4, or 5 roads, a mixed-use determination needs

to be completed. Items under consideration for this analysis include driving conditions, operator characteristics, road design and condition, and safety.

Environmental Consequences. OML 2 roads provide access into the "interior" of the general Forest area, such as hunters would like; while OML 3 and higher roads tend to be point-to-point connectors and thoroughfares requested by day-trip recreational ORV riders. Therefore, while Alternative 1 (no action) has the highest total number of roads and access across the general Forest area, (and addresses this issue for more motorized access) it provides the least amount of inter-Forest connectivity by prohibiting use on OML 3, 4, and 5 roads. Alternative 3 provides the least amount of general Forest area access (OML 2 routes) and the second least amount of connectivity. Alternative 4 provides the highest possible balance of both general Forest areas access on OML 2 roads and connectivity through mixed use on OML 3, 4, and 5 roads. Table 8 shows roads proposed open to ORV use by alternative and OML.

Table 8. Roads proposed open to ORV use by alternative and OML

OML	Total Miles	Alternative 1 (No Action)	Alternative 2 (Proposed Action)	Alternative 3	Alternative 4
1	382	0	0	0	0
2	1,676	1,530	1,168	705	1,493
3	183	0	83	76	113
4	252	0	133	99	158
5	34	0	0	0	13
Total Miles Open		1,530	1,384	880	1,777
Total Mixed Use Open		0	216	175	284

Issue 4: Protection of natural resources and non-motorized recreation experiences

Affected Environment Natural Resources (Wildlife – See issue 5 for hydrology and soils): There are a total of 51 TES, RFSS, MIS on the CNF. Each of the 21 lynx analysis units on the Chippewa Forest are about 50,000 acres in size and follow approximate ecological land type boundaries. The affected environment and direct and indirect effects of each project alternative on TES and RFSS are more fully described in the wildlife specialist report: 540-2 Wildlife and T/E/S

There have been four probable lynx sightings on the CNF. District personnel have surveyed for Canada lynx tracks in selected townships along Forest Service roads, and are alert for Canada lynx tracks and opportunities to collect scat for DNA analysis (Baker and Anderson 2006).

The average open road density on all ownerships across all lynx analysis units on the Chippewa Forest is 2.72 miles per square mile. Recent road decommissioning from timber projects has reduced the average open road density to 2.63 miles per square mile. Although previous timber projects are making progress at reducing road densities in each lynx analysis unit, road densities in most lynx analysis units remain above the 2 miles per square mile threshold in the Canada Lynx Conservation Assessment and Strategy.

The Chippewa Forest provides habitat for 47 RFSS. The northern goshawk, red-shouldered hawk, aquatic species group, and plant species group were judged to be the most sensitive to changes in OHV use.

MIS and habitats on the Chippewa Forest include gray wolf, bald eagle, northern goshawk, and white pine.

There are 14 non-native invasive species on the Chippewa Forest that have a very high, high, moderate, low, or low threat to natural communities (USDA Forest Service 2002). Non-native invasive species are most likely to spread into areas where ground disturbance has occurred. Sources of weed dispersal include OHV use on roads, trails, utility corridors, gravel pits, wildlife openings, landings, and old skid paths. Non-native invasive species near infested trails or utility corridors have the highest likelihood of spreading because of OHV use.

Affected Environment Non-Motorized Recreation Experiences: In 1982 the Forest Service produced the Recreation Opportunity Spectrum (ROS) Handbook as the basic framework for planning and managing the recreation resource. The FEIS used the ROS Handbook, Eastern Region Lakes States Supplement, to adapt to local conditions experienced throughout northern Minnesota. ROS is described as "not a land classification system, rather a management objective, a way of describing and providing a variety of recreation opportunities." Opportunities for experience along the spectrum represent a range from a very high probability of solitude, self-reliance, challenge, and risk, to a very social experience where self-reliance, challenge, and risk are relatively unimportant. About 2.5 percent of the Chippewa Forest falls within semi-primitive motorized and 3.9 percent within semi-primitive non-motorized. See the Recreation Specialist Report for additional information: 550-2 Recreation

Comments received during the public scoping expressed concern that roads designated as open to ORVs adjacent to semi-primitive non-motorized areas and the North Country National Scenic Trail would encourage incursions into these non-motorized areas. These individuals proposed the establishment of a buffer zone to protect the integrity of the non-motorized recreation experience. Two different buffers were used to reflect the different themes carried forward in Alternative 3 (1.0 mile) and Alternative 4 (0.5 mile). A second indicator for the amount of ORV access is road densities within 0.5 mile and 1.0 mile of semi-primitive non-motorized areas and the North Country National Scenic Trail.

Environmental Consequences Natural Resources (Wildlife – See issue 5 for hydrology and soils): The designation and use of routes considered in this project may affect wildlife, fish, and rare plant resources in a number of ways. Motorized vehicle traffic can cause a visual or audible disturbance to some species of wildlife. If this occurs during a critical breeding time, it may cause nest or territory abandonment and lead to decreased fecundity rates. Increased densities of packed snow trails can reduce the competitive advantage of species like the Canada lynx, by allowing other predators that are not as adapted for deep snow conditions, to access suitable lynx habitat and compete for prey species. Increased levels of access to the Forest can also facilitate the illegal killing of wildlife species.

TES Wildlife Species: There are three TES wildlife species on the Chippewa Forest: the bald eagle, gray wolf, and Canada lynx. All action alternatives would reduce human disturbance to nesting and foraging bald eagles, with Alternative 3 being the most desirable. Alternatives 2 and 3 would reduce human disturbance to gray wolves. Alternative 4 would increase human disturbance for wolves during the hunting season from September 15 to December 31.

For Canada lynx, none of the alternatives for this project change the current road density. Nor do they change the amount or kinds of roads that would be subject to snow plowing in the winter. The differences in the alternatives are in the amount and kinds of roads that will be open to OHV use. The OHVs being considered in this project are not expected to be used to any great degree on roads that are not plowed during winter snow conditions. Management of snowmobile travel is not being considered in this project. There is a remote possibility that OHVs may be used to access deep snow country, thus allowing for the potential for access by competing predators of Canada lynx. However, it is not expected to account for any reliable variation from one alternative to another, and will have no appreciable impact on the lynx or its habitat. The possibility of lynx mortality due to a collision with an OHV is very unlikely. Of the alternatives evaluated, Alternative 3 would best minimize the potential impacts to lynx by OHVs within the CNF; with Alternative 4 next because roads open to seasonal hunting are not expected to have an impact remote snow conditions. Alternatives 2 and 1 would follow respectively.

> The biological assessment has determined that all alternatives **may affect but are not likely to adversely affect the bald eagle, gray wolf, and Canada lynx.** Alternative 3 presents best conditions for all three species.

Regional Forester Sensitive Species: all action alternatives would reduce human disturbance to nesting northern goshawk and red-shouldered hawks in all analysis areas, with Alternative 3 being the most desirable.

Please refer to the Hydrology and Soils Specialist Report for a discussion of how all action alternatives would reduce the potential for erosion and sedimentation within the riparian management zone, or 200 feet of lakes and streams, that provide habitat for the aquatic species guild. Alternative 3 would have the least effect on sensitive aquatic species. 520-1 Hydrology & Soils

OHVs that explore dead-nd roads eventually extend the road further into the Forest, which may directly affect sensitive plants within the plant species guild by trampling. OHVs and snowmobiles compact the insulating snow layer, and allow deeper penetration of subzero temperatures that dormant sensitive plants cannot survive. OHVs can cause soil compaction, which reduces soil aeration, structure, hydrology, pH, nutrients, and spore dispersal. OHVs can also contribute to the invasion of exotic earthworms that consume the duff layer, by spreading earthworm eggs via tire treads. OHVs can also contribute to the infestation of non-native plants by transporting noxious weed seeds in clods of earth, and disturbing the soil to allow the establishment of aggressive exotic plants.

> The biological evaluation has determined that all action alternatives **may impact 28 (out of 47; or 60 percent) of the RFSS on the CNF, with Alternative 3 being the most desirable.** There would be no impact to the remaining 19 species. This determination is based upon the National Forest Management Act requirement for maintaining viable populations of all native species in habitats that are well-distributed within the CNF planning area.

Management Indicator Species: Please see previous information for gray wolf, bald eagle, and northern goshawk. White pine planting as a component of within-stand diversity has been extremely limited due to browsing by white-tailed deer. Alternatives 1, 2, 3, and 4 would have little effect on white pine. However, Alternative 4 would increase seasonal hunting access by OHVs on 645 miles across the CNF. Increased hunting pressure in the fall would help to reduce the deer herd over the winter, when white pine seedlings are most vulnerable to browsing.

Non-native Invasive Species: Non-native invasive plants near infested trails or utility corridors are most likely to spread into the Forest due to ground disturbance caused by OHV use. All action alternatives reduce the number of OHV routes that cross utility corridors, with Alternative 3 having the least amount and therefore the most desirable alternative.

Environmental Consequences Non-Motorized Recreation Experiences: In all of the alternatives, cross-country travel would continue to be prohibited. Under the no-action alternative and proposed action, ROS classifications and experiences would be maintained at current levels and no buffer zones would occur around the semi-primitive non-motorized areas or the North Country National Scenic Trail. Conversely, individuals that desire a non-motorized recreation experience would benefit by implementing Alternative 3. This alternative would provide an increase in opportunities to escape the sight and sounds associated with motorized use. For example, within 0.5 miles and 1.0 miles from semi-primitive non-motorized areas, road densities would drop 0.4 and 0.5 miles, respectively, from the existing condition to conditions under Alternative 3. Similarly, within 0.5 miles and 1.0 miles from the North Country Scenic Trail, road densities would drop 1.2 and 1 mile per square mile, respectively.

In Alternative 4, road densities in ROS classifications would increase in all ROS classifications, except semi-primitive motorized which would decrease (0.04 miles per square mile). A 0.5-mile buffer would be established around the semi-primitive non-motorized areas and the North Country National Scenic Trail.

Issue 5: Dead end routes may encourage illegal use

Affected Environment. Riparian areas (lakes, streams, and wetlands) cover approximately 49 percent of the land within the CNF proclamation boundaries; roads cross streams, on average, once for every 1.3 miles of stream on the Forest. No systematic monitoring or surveys have been done to quantify the effects existing trails and access sites, or cross-country use by ORVs or snowmobiles, are having on soil, water, or riparian resources. However, observation of use patterns in the field suggests that ORV use on locations other than road or designated trails (cross-country use) does occur and is causing site-level impacts to soil, water, and riparian resources.

Individuals use dead-end spurs primarily for hunting and general Forest access. Dead-ends are defined in this analysis as roads designated open to ORV use that do not connect to another system road open to use and are less than 0.25 mile long. There are a total of 507 individual NF System roads, for a total of 127 miles, that are 0.25 mile or less and do not connect to anther Forest Service System road designated open for ORV use. Of the 127 miles of system roads 0.25 mile or less in length, 81 miles are open and 46 miles are closed to ORV use.

Environmental Consequences. The direct effects of OHV routes on water resources include input of eroded sediment into water bodies and changes to surface and subsurface water flow patterns. Indirect effects include changes to stream channel morphology, impacts to aquatic habitat, and impacts to wetland hydrology and vegetation due to excess sediment or runoff. The potential for these effects can be assessed by looking at the mileage of routes in the 100-foot-wide riparian management zone (RMZ), the miles of routes in wetlands, the number of stream crossings, and the mile of routes in the low motorized use capability (MUC) class (see Table 9).

Direct effects on soils include erosion, compaction, and rutting due to traffic on steep slopes or compactable soils. These can be assessed by calculating the miles of routes on steep slopes or in the low MUC class. Indirect effects involve erosion, compaction, and rutting due to off-route traffic. This is assessed by tabulating the number of dead-end routes open for use.

All alternatives comply with Forest Plan and regulatory direction. However, Alternative 3 most closely meets the direction by limiting the routes in areas sensitive to soil and water resources. It also contains the lowest number of stream crossings of all alternatives. Alternative 2 also makes better progress toward Forest Plan goals relative to Alternative 1 and 4, but contains significantly more routes in sensitive areas and over twice the number of stream crossings. Alternatives 1 and 4 contain similar amounts of routes in sensitive areas. Although Alternatives 1 and 4 comply with applicable direction, they do little to improve existing conditions. Alternative 1 does not respond to soil and water concerns such as riparian zones and wetlands. Alternative 4 actually contains more routes in sensitive areas and more crossings than Alternative 1 (no action) leading to the conclusion that Alternative 4 is least likely to help improve water and soil conditions.

Table 9. Results of analysis calculations from GIS

Analysis Indicator	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Miles open in 100' riparian zone	17.7	15	4.5	21.8
Miles open in 200' riparian zone	53.4	48.3	17.1	65.4
Miles in wetlands	100.6	66.6	38.5	104.9
Number of stream crossings	111	133	66	171
Miles in low MUC class	190.7	138.3	80.9	212.8
Miles on steep (>18%) slopes	16.3	12.9	5.8	16.2
Number of dead ends	507	288	2	482

Issue 6: The lack of annual operations and maintenance funding for roads

Affected Environment. The CNF currently manages 2,527 miles of roads within the boundaries of the Forest. The majority of the Forest Service System roads are OML 2, which are generally routes through the woods that access timber stands, and were constructed to allow timber removal.

Roads are also categorized as open or closed. All OML 1 roads are closed to public use. OML 2 roads are primarily open to public motorized use.

Funding available for maintaining CNF roadways has decreased by 65 percent over the last 4 years. Because OML 3, 4, and 5 roads are higher standard roads, they are subject to the National Highway Traffic Safety Act; therefore, limited Forest resources are currently spent to fully maintain primarily the OML 5 and 4 roads. Only those OML 3 (approximately 40 percent) roads that receive the most traffic received annual maintenance. There have been no maintenance expenditures on OML 1 or OML 2 roads for the past 2 years.

With an average cost of $330 per mile to complete basic grading, brushing, mowing, and some surface replacement, the Chippewa Forest road maintenance budget has a base cost of just over $117,000 for the OML 3, 4, and 5 roads (see Table 10).

Table 10. Chippewa Forest baseline operation and maintenance costs for OML 3, 4, 5 roads

OML	Total	Total Miles Maintained	Baseline Annual Maintenance Cost ($330/mile)
1	382	0	
2	1,676	0	
3	183	70	$23,100
4	252	252	$83,160
5	34	34	$11,220
Total	2,527	356	$117,480

In FY06, 380 miles of FS roads received some level of maintenance, including grading, brushing, mowing, or culvert replacements (Forest records – see Transportation Report). The contracted cost to maintain the 380 miles was $125,575, not including contract administrative costs. Other maintenance costs include road signing, resurfacing, and occasional highway striping at the recreation areas.

Environmental Consequences. The designation of ORV use to a roadway may increase maintenance required every year, and therefore maintenance costs. After 1 pass with an ORV, tire tracks are visible; annual vegetation is removed after 10 passes, and berms can form after 100 passes. After 200 passes with an ORV, the center of the trail surface is indented (Stokowski and LaPointe 2000). These changes to the road surface will alter the tracking ability of passenger cars that also use these roads. Road grading to minimize berms that may form in the roadway surface may be required. Brushing and/or mowing are also beneficial to keep brush and vegetation from growing in the roadway that leads to degraded sight distances.

The number of times a road would need to be bladed depends on the amount of ORV and other traffic use it receives. The range in values in the following table represents the difference between blading the roadway once or twice per season, at a cost of $60 per mile per blading. OML 2 cost estimates are based on a projection of $247 per mile; although maintenance is not currently funded for these roads (see Table 11).

Table 11. Projected operation and maintenance costs by alternative

OML	Total Miles	Alternative 1 (No Action)	Alternative 2 (Proposed Action)	Alternative 3	Alternative 4
1	382	0	0	0	0
2	1,676	1,530	1,168	705	1,493
3	183	0	83	76	113
4	252	0	133	99	158
5	34	0	0	0	13
Total Miles Open		1,530	1,384	880	1,777
Projected O&M Cost: OML 2 Roads		$379, 371	$332,724	$225,202	$282,562
Projected O&M Cost: OML 3, 4, 5 Roads		$0	$12,960–$25,920	$11,160–$22,320	$17,700–$35,400

The alternatives with the highest miles of mixed use designations are also the alternatives expected to include the highest potential operations and maintenance costs. Alternative 1 (no action) presents the lowest potential increase for OML 3, 4, and 5 roads, and yet the highest for OML 2 roads. (Currently, no maintenance occurs on OML 2 roads and all ORV use is designated only on OML 2 roads.) Alternative 4, with 71 percent of all roads designated, would have the highest potential increase to OML 3, 4, and 5 roads. Alternative 3 could lead to the lowest potential operation and maintenance cost increase to all OML level roads.

Issue 7: Environmental Justice and miles designated open in traditional Tribal hunting and gathering areas

Affected Environment. The designation of roads open to ORV use must be in compliance with Executive Order (EO) 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations. The EO calls for consideration of the environmental, health, and economic effects on minority and low-income areas including the consumption patterns for fish and wildlife. In Minnesota, twice the State percentage for individuals below the poverty level is 15.8 percent and 21.0 percent for minority populations (U.S. Census Bureau 2000). Conditions in Beltrami County and the LLBO Reservation meet the requirements for an environmental justice assessment.

The Forest Service considers potential impacts to public health from the proposed action to be limited to road safety issues. Therefore, potential impacts to public health and safety will be considered as part of the mixed-use analysis (highway legal vehicles and ORVs traveling along the same roadway).

In addition to the outreach with the general public, personal contacts have been made with the LLBO Tribal Historic Preservation Office (THPO) and Local Indian Councils (LICs). For each of the 15 LICs, Forest staff attended 2 meetings; 1 to present the project, and another to receive feedback on the proposal. The LIC meetings were conducted between December 2006 and March of 2007. Information from the LICs was used to develop Alternative 4 for analysis in this project.

NF System roads support a range of activities including driving to work, accessing recreation opportunities, and traveling to areas for traditional American Indian practices and uses. On the CNF in general, NF System roads were more important to American Indian survey participants than non-Native Americans (Management and Use of Forest Roads on the Chippewa National Forests, Perceptions of Local Residents, Pamela Jakes, North Central Research Station [2001]). While Forest roads are important for Tribal access, relatively few Band members own ORVs, and primary Forest access is by means of passenger or high clearance vehicles (Jamie Mitchell, LLBO Conservation Officer, observation).

During the spring, access is needed for maple syruping during snow-melt; then for summer fishing and gathering of Forest products, such as birch bark, plants, herbs, and firewood. In late summer wild rice is harvested and balsam boughs gathered. The majority of ORV use occurs in the fall during the hunting and trapping seasons (2001 Genereux OHV Study), which typically occurs between mid-September and December. Access for ice fishing and spearing is needed once the lakes are covered in ice during the winter months. Throughout the year individuals use ORVs as means of transportation to travel in and around communities, or to get from one point to another. General recreational riding typically takes place during the snow free months. Table 12 summarizes environmental justice indicators for the existing condition.

Table 12. Summary of environmental justice indicators for the existing condition

Environment Justice Indictors	No Action
Miles of Forest Service System roads open for ORV use on the CNF	1,530
Miles of Forest Service System roads open to ORV use in identified traditional hunting and gathering areas	632
Miles of Forest Service System roads closed to ORV use in identified traditional hunting and gathering areas	447
Miles of Forest Service System roads open seasonally to ORV use in identified traditional hunting and gathering areas	0
Miles of Forest Service System roads open seasonally (mid-September to December 31) for hunter access to ORV use in identified traditional hunting and gathering areas	0

Environmental Consequences. Table 13 outlines the miles of road open to ORV use within traditional hunting and gathering areas for Tribal members for each alternative.

Table 13. Summary of alternatives for environmental justice indicators

Environment Justice Indictors	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Miles of Forest Service System roads open to ORV use in identified traditional hunting and gathering areas	632	549	382	446
Miles of Forest Service System roads closed to ORV use in identified traditional hunting and gathering areas	447	456	665	288
Miles of Forest Service System roads open seasonally to ORV use in identified traditional hunting and gathering areas	0	74	32	70
Miles of Forest Service System roads open seasonally (mid-September to December 31) for hunter access to ORV use in identified traditional hunting and gathering areas	0	0	0	275

All of the alternatives would continue to provide adequate access using NF System roads to meet the needs of minority and low income populations in Beltrami, Cass, Itasca Counties, and LLBO Reservation. In accordance with EO direction, indirectly, none of the alternatives would result in a disproportionately high and adverse human health or environmental effects regarding ORV use for minority and low income populations on the CNF. The LLBO DRM, THPO, or LICs Tribal organizations have not indicated that any of the alternatives would have negative effects on the consumption of subsistence fish or wildlife.

Mixed Use. Alternative 1 (no action) prohibits mixed use based on Forest Plan standards and guidelines, and therefore presents the lowest potential risk for highway legal and non-highway legal vehicle traffic accidents. Alternative 4, with 295 miles of proposed mixed use, presents the highest potential traffic safety risk. OML 2 roads designated open for ORV use still allow high-clearance vehicles and logging truck traffic and ORV vehicles to travel the same corridor concurrently. However, a formal analysis is not required for this use to occur.

Summary Comparison of Cumulative Effects

Outlined as follows are three general categories of past, present, potential future, and connected actions that may contribute towards the environmental consequences to the CNF Off-Highway Vehicle Road Travel Access Project. For a more detailed discussion of the potential cumulative effects by resource area, please see the individual specialist reports for each resource area.

Past, Present, and Reasonably Foreseeable Future Road Closures

The CNF Forest Plan made decisions regarding future travel access needs on NF System roads. As stated in O-TS-7, "Unneeded roads will be decommissioned and closed to motorized vehicles. Roads that are not necessary for long-term resource management are considered 'unneeded.'"(page 2-48) Additionally, O-TS-8 states, "The Forest will decommission approximately 200 miles of road." (page 2-48). Annually, the Chippewa National Forest proposes approximately 20 to 40 miles of road decommissioning in two to three vegetation environmental assessments. All past road decommissioning decisions were integrated into the project alternatives.

Environmental analyses for several vegetation management projects have identified roads to be decommissioned since the Forest Plan was finalized. The Forest currently has over 170 miles of roads identified for decommissioning. On-the-ground implementation of such decommissioning is progressing at a slow pace due to limited budgets. Since 2004 approximately 60 miles have been decommissioned at a total cost of $48,000. However, a majority of those miles have been sites that 're-vegetated' and 'self-decommissioned' naturally. The reduction of mileage will have minimal impact to the overall operation and maintenance expenditures on the Forest because the majority of the roads proposed for decommissioning are generally the low standard roads (OML 1) that do not currently receive maintenance. Thus, the overall mileage will go down, but the expenses will remain the same.

All alternatives proposed in this project will use existing roads. Therefore, no new acres of upland young and open vegetation conditions are expected to result from this project. This project will not result in cumulative effects relative to the upland young and open forest indicator typically used in cumulative effects analysis of timber management projects.

The quality and standard of roads on the CNF has increased substantially over the past 15 years because of timber harvest and recreational activities, although road density has recently begun to stabilize. Increased road miles and road usage have lowered the amount of remote habitat available to threatened, endangered, and sensitive species. Increased human access may result in disturbance during the breeding season, illegal shooting and trapping, collisions with vehicles, introduced parasites and diseases, competition with other predators, reduced water quality from erosion and sedimentation, trampling, browsing, snow compaction, soil compaction, invasion of exotic earthworms, and infestation of non-native plants.

Road decommissioning from previous resource management projects is making progress at reducing the road density in each lynx analysis unit; however, total road density remains above the 2 miles per square mile threshold in the Canada Lynx Conservation Assessment and Strategy for all lynx analysis units except LAU 14.

> The cumulative effects from all action alternatives meet Endangered Species Act requirements for threatened and endangered species, and Forest Plan requirements for RFSS, MIS, and non-native invasive species, with Alternative 3 being the most desirable.

Connected Actions by Surrounding Landowners

The State of Minnesota Department of Natural Resources (DNR) is developing plans to classify each of the seven State Forests and scattered State Forest lands within and adjacent to the boundaries of the CNF for ORV use. State Forest lands will be classified as closed, limited, or managed for motorized use. The DNR; Forest Service; Beltrami, Cass, and Itasca Counties; LLBO; and township governments have collaborated in joint ORV planning for each agency.

http://www.dnr.state.mn.us/ohv/index.html

Table 13. ORV route designations on State lands

State Forest	Proposed Classification
Battleground	Closed
Bigfork	Managed
Blackduck	Managed
Bowstring	Limited
Buena Vista	Limited
Remer	Limited
Welsh Lake	Closed
Scattered State Forest Lands within Southeast Beltrami County	Managed
Scattered State Forest Lands within Northern Cass County	Limited
Scattered State Forest Lands within Northwest Itasca County (except lands south of U.S. Highway 2 which are proposed for limited classification)	Managed

Source: Proposed Forest Classification and Forest Road and Trail Designations for State Forest Lands in and Near the Chippewa National Forest, Draft Proposal, page 2.

Due to the scope of the Off-Highway Vehicle Road Travel Access Project, as identified in the purpose and need, cumulative effects are limited to total ORV access within the boundary of the CNF. Because of (1) the intermixed land ownership on the Forest, and (2) the fact DNR has not made final decisions on State Forest classifications; there is not enough information available, such as specific miles of roads open and closed for motor vehicle use, to conduct an accurate cumulative effects analysis for ORV use on both state and Federal lands. It is anticipated that DNR Commissioner will announce his final decisions for the seven State Forest classifications and scattered lands located within the project area in the summer of 2007.

Chippewa Forest Motorized Trail Designation

Along with the road decommissioning, the Forest Plan also states that the Forest may develop up to 90 miles of additional trails in the next 10 years to respond to an ever increasing demand for OHV opportunities in northern Minnesota.

Consultation and Coordination

The Forest Service consulted the following individuals, Federal, state, and local agencies, Tribes and non-Forest Service persons during the development of this environmental assessment.

Forest Service ID Team Members

Ann Long-Voelkner: *Project Leader; Public Scoping and Comments*
Lisa Whitcomb: *Project Manager*
Mike Martin: *Recreation; Social; Economic; Environmental Justice*
Luke Rutten: *Hydrology; Soils*
Stan Kot: *Threatened, Endangered, & Sensitive Species; Wildlife*
Millie Baird: *Transportation*
Drew Wilson: *Geographic Information Systems (GIS)*
Andrea LaVasseur: *Heritage Resources*
Frank Polich: *Mixed Use Analysis*

Federal, State, and Local Agencies

U.S. Fish & Wildlife Service: *Susan Oetker*
Minnesota Department of Natural Resources (DNR): *DNR Regional commissioners DNR Law Enforcement; other resource personnel*
Cass, Itasca, and Beltrami Counties: *Government; Land Commissioners; other personnel*

Tribes

Leech Lake Band of Ojibwe (LLBO): *Department of Resource Management; Tribal Historic Preservation Office; 16 Local Indian Councils*

A complete description of the workshops and discussions with the 16 Local Indian Councils and other Tribal members can be found in the project record.

Others

Initial scoping letters and information went to over 400 people. The list is available at the Chippewa Forest Supervisor's Office.